



## Early Journal Content on JSTOR, Free to Anyone in the World

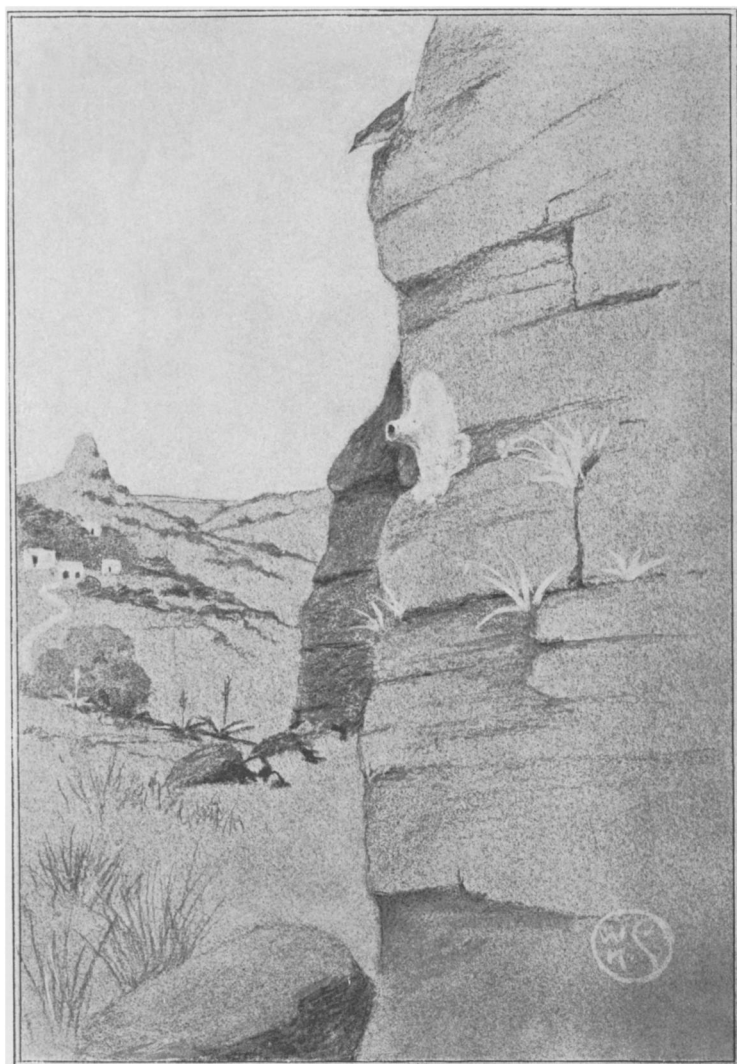
This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact [support@jstor.org](mailto:support@jstor.org).



Nest of Rock Nuthatch, *sitta syriaca*, plastered to the rock face, of mud, moistened with the bird's saliva.

THE  
WILSON BULLETIN

A QUARTERLY JOURNAL OF  
ORNITHOLOGY

---

---

VOL. IX.

MARCH, 1902.

No. 1.

---

---

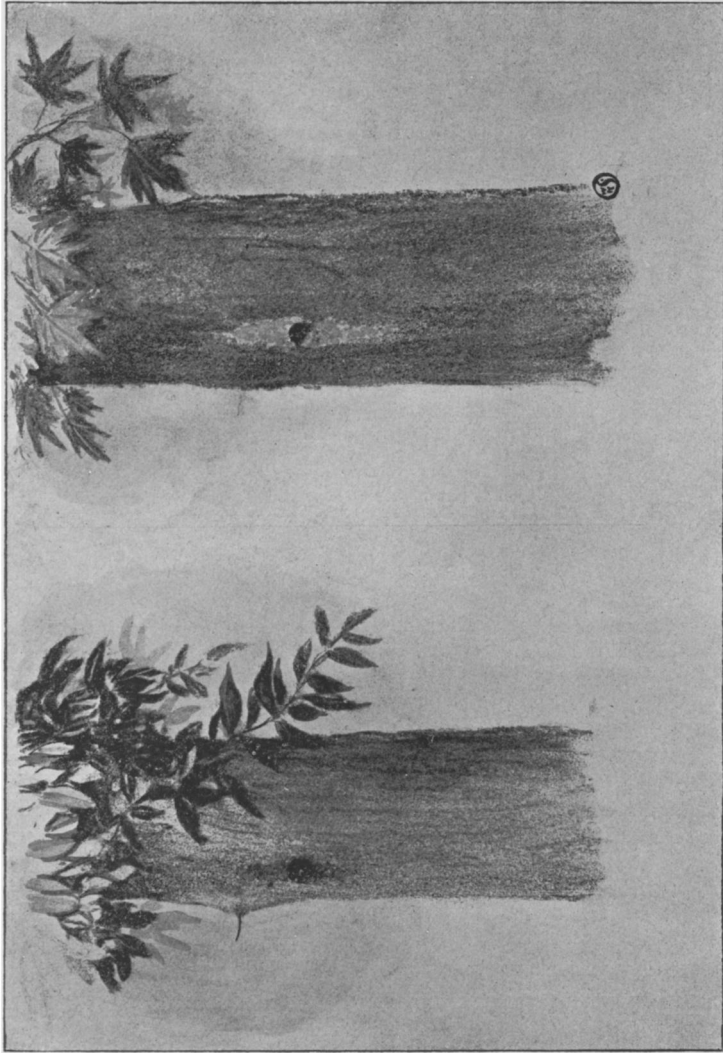
THE ROCK NUTHATCH AND ITS NEST.

BY H. C. TRACY.

THE Rock Nuthatch,\* best known as a Syrian bird, is common as far north as the Black Sea coast, not far from which the following observations were made. The bird is ashy-grey above, with black lores (the stripe extending to the mantle region); the "impure white" of the under parts changes to rust red on the belly and under tail-coverts. The Rock Nuthatch is larger than the common European Nuthatch.

If the European bird is rightly named by the Germans, Kleiber (maker of a mud-wall), the Syrian deserves not this but a better title as an expert clay mixer and moulder. When the climate is dry and fairly warm, an adobe house is good enough for anybody. The Rock Nuthatch found this out long ago. Given a little hollow place in a wall of rock, facing the sun, he will fit over it a cap of mortar so firm, so fast to the rock, that neither wind, nor rain, nor creeping thing can break it down till long after he is through

\*Given in Brehm as *Sitta neumayeri* (*S. syriaca*, *saxitalis*, references, etc., of other authorities). Brehm's *Thier Leben*, Vol. II., p. 560.

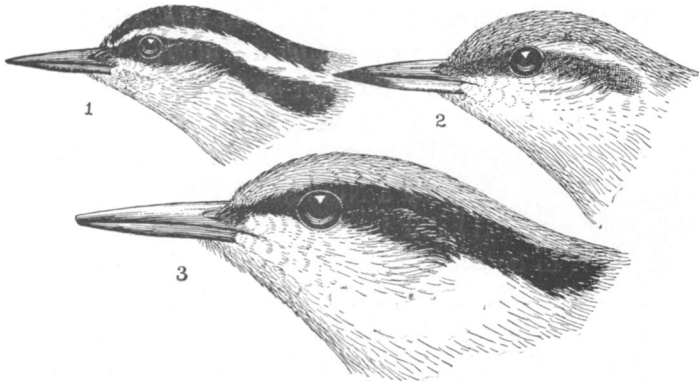


Left-hand figure: Nest of Red-bellied Nuthatch, *Sitta canadensis*, cut out clean, but with pitch from pine plastered above and below hole.

Right-hand figure: Nest of European Nuthatch, *Sitta cæsia*. A natural cavity or woodpecker's nest plastered up with mud.

with it. The material is fine clay mixed with plant fibers—incomparably better than ordinary adobe for strength and endurance—so well packed that when dry a stiff knife blade must be used to cut through the inch wall. The outer base of the nest is ten or twelve inches in diameter. The horizontal funnel-shaped entrance is protruded about three inches beyond the domed face, and is, of course, just large enough to admit the body of the bird. The nest is naturally as inconspicuous as the ashy-colored Nuthatch on his grey limestone hunting ground, but he sometimes boldly adorns it with trophies of the chase in the shape of bright red wings of moths attached while the plaster was fresh.

---



1. Red-breasted Nuthatch, *Sitta canadensis*. Natural size.
  2. European Nuthatch, *Sitta caesia*. Natural size.
  3. Rock Nuthatch, *Sitta syriaca*. Natural size.
- 

The following description\* of the common European Nuthatch and his nesting habits will serve for comparison:

“The nest always occupies a hollow; regularly in a tree cavity, exceptionally in crannies of walls or rocks. The wise bird is glad to make use of the timber-fashioned dwelling of the master woodpecker for his baby cradle, but does not permit the door of his dwelling to be larger than is necessary for himself; and to that end he adopts a highly ingenious

\*Translated from Brehm's *Thier Leben*, Vol. II., p. 559.

expedient, viz.: to wall up the entrance to his nest, reducing it to a small hole, just large enough for him to slip in and out of. 'This,' reports my father, 'is done with clay or other viscous earth which, as in the nests of swallows, is moistened, bound and held together with a glutinous saliva. The walling up of the nest cavity soon comes to an end, as he carries lump after lump of clay in his bill, moistens it all over, and sticks it fast in its place. It is just as if a little mason, to lock or obstruct a door, was laying in and making fast one stone after another.'

"This clay wall is two and more centimeters in thickness, and when dry is so firm that it cannot be broken out with the finger, but a chisel must be used if one would burst it. The entrance hole, which is always in the middle of the wall, is circular, and so narrow that a Nuthatch can scarcely creep through. Once let the nest be finished, it is safe from all animal marauders. Only the woodpeckers have the ability to demolish it, and they do so when the nest-hole has been taken from them by a Nuthatch."

The only parallel habit in the American Nuthatches—if, indeed, it is to be compared with mud-daubing—is that of the Red-bellied Nuthatch, who puts a patch of pine turpentine above and below his nest-hole. The nests of the European Nuthatch found, as quoted above, regularly in tree cavities, sometimes in rock-crannies, grade naturally into those of the rock-nesting species; but the latter are the better developed—completely so, in fact, for there is apparently no room for improvement. Whether the tree-nesting species have degenerated from the perfected clay workers, or only indicate the path along which the latter reached their present habits, is a question that is interesting, and very possibly might be answered by those who have more data than the writer. The natural supposition is that the nuthatches are originally birds of the woods, and that where timber was scarce some took to life on the rocky ledges, there learning gradually to build the form of nest best adapted to their environment.

However he came to be the clever fellow that he is, the shy rock-clamberer, with his sprightly manners and clear, ringing trill, is sure to be a favorite with every one that makes his acquaintance.

---

## PELICANS OF TAMPA BAY.

BY JOHN W. DANIEL, JR.

BROWN PELICANS (*Pelecanus fuscus*) are still to be found in fair numbers along the coast of Florida, in spite of the decimating influences with which they have to cope. Although awkward, ungainly birds, one observing them for the first time in their native haunts, is likely to become interested at once in their characteristically peculiar maneuvers while fishing, diving and soaring. Most of the time their movements are heavy and clumsy, though often extremely graceful, and at times ludicrous.

During December, 1898, while on my way to Cuba, I stopped for a couple of days at Port Tampa, Florida. I had very good opportunities for studying the pelicans, which were abundant in the bay. The first pelicans seen were noticed about dawn, the morning of my arrival, perched upon a series of posts, the remains of an old pier which extended parallel with the shore, about seventy-five yards out from the water line. Upon each post sat a pelican, dimly outlined in the early light. They had probably spent the night perched upon these posts. Later, as the light became stronger, the birds began flying about the bay. Other pelicans joined them, arriving from north and south, until there were at least a hundred individuals present in the neighborhood. Nearly all were intent upon fishing. They flew over the bay in all directions, at the height of from ten to forty feet, scanning the surface for fish. Their flight while fish-